

**PATENT**

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**THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Thomas Gritzmacher  
Serial No. : 10/005,771  
Filing Date : November 8, 2001  
For : Billing System and Method for Network  
Group Art Unit : 3693  
Examiner : Sara M. Chandler  
Attorney Docket No. : NG(MS)7266

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Alexandria, VA 22313-1450

**APPEAL BRIEF**

Sir:

Pursuant to the Notice of Appeal filed in this case on June 23, 2008,  
Appellant's representative presents this Appeal Brief.

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**II. REAL PARTY IN INTEREST**

The real party in interest is Northrop Grumman Corporation.

**III. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

**IV. STATUS OF CLAIMS**

Claims 1, 3-6, 8, 9, 11-16, 18-28 and 36 which are attached in the first Appendix, are currently pending in this application. Claims 2, 7, 10, 17, 29-35 and 37 have been canceled. Claims 1, 5-6, 8-9, 11-16, 19-27 and 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2002/0176547 to Jones ("Jones"). Claims 3 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jones in view of U.S. Publication No. 2001/0055291 to Schweitzer ("Schweitzer"). Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Jones in view of Schweitzer and further in view of EP 1 775 929 A2 to Buhler ("Buhler"). Claim 28 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Jones in view of Buhler. The rejection of claims 1, 3-6, 8, 9, 11-16, 18-28 and 36 is appealed.

**V. STATUS OF AMENDMENTS**

A response to a Final Office Action (hereinafter, "Final Rejection") issued on March 20, 2008 was filed on May 13, 2008. No amendments were made to the claims after the Final Rejection. An Advisory Action Before Filing an Appeal Brief (hereinafter, "Advisory Action") dated June 9, 2008 was issued. The Advisory Action indicated that the request for reconsideration set forth in the response to the Final Rejection was considered, but did not place the application in condition for allowance.

**VI. SUMMARY OF THE CLAIMED SUBJECT MATTER**

**A. Claim 1**

One aspect of the present invention, as recited in claim 1, is directed to a method of billing usage over a network (30 of FIG. 1; Par. [0022]). The method comprises determining when a network interface (54 of FIG. 2) is turned on at a client system (10 of FIG. 1; Par. [0029]). The method also comprises determining when the network interface (54 of FIG. 2) is turned off at the client system (10 of FIG. 1; Par. [0031]). The method further comprises storing, at the client system (10 of FIG. 1), information relating to a time-based bill based on when the network interface (54 of FIG. 2) is turned on and when the network interface (54 of FIG. 2) is turned off (Par. [0029]). The method still further comprises transmitting a call detail record from the client system (10 of FIG. 1) to a billing module (66 of FIG. 2) on a billing system (40 of FIG. 1) based on the information relating to the time-based bill (Par. [0033]).

**B. Claim 3**

Claim 3 is directed to the method of claim 1, wherein obtaining said information comprises encrypting said information, transmitting said encrypted information across said communication link, and decrypting said encrypted information (Par. [0027]).

**C. Claim 4**

Claim 4 is directed to the method of claim 3, wherein said information relates to a video file (Par. [0027]).

**D. Claim 15**

Claim 15 is directed to the method of claim 1, further comprising displaying call detail record information based on information relating to said time-based bill (Par. [0034]).

**E. Claim 16**

Another aspect of the invention, as recited in claim 16, is directed to a method comprising connecting a client (10 of FIG. 1) with a content provider (20 of FIG. 1) of a desired content (Par. [0027]). The method also comprises obtaining the desired content from the content provider (20 of FIG. 1; Par. [0027]) and disconnecting the client (10 of FIG. 1) from the content provider (20 of FIG. 1; Par. [0032]). The method further comprises determining an amount of time the client (10 of FIG. 1) is connected to the content provider (20 of FIG. 1; Par. [0029]). The method still further comprises storing information at the client (10 of FIG. 1) related to the determined amount of time (Par. [0029]) and providing, from the client (10 of FIG. 1), the stored information to a billing system (40 of FIG. 1; Par. [0033]).

**F. Claim 18**

Claim 18 is directed to the method of claim 16, wherein obtaining said at least one of a video file, a data file and an audio file comprises encrypting said at least one of a video file, a data file and an audio file (Par. [0027]). The method further comprises transmitting said encrypted at least one of a video file, a data file and an audio file from said content provider across a network (Par. [0027]). The method yet further comprises decrypting said encrypted at least one of a video file, a data file and an audio file (Par. [0027]).

**G. Claim 27**

Claim 27 is directed to the method of claim 16, further comprising displaying call detail record information (Par. [0034]).

**H. Claim 28**

Claim 28 is directed to the method of claim 16, wherein the desired content relates to a video file (Par. [0027]).

**I. Claim 36**

Still another aspect of the invention, as recited in claim 36 is directed to a program storage device readable by a machine (10 of FIG. 1), tangibly embodying a program of instructions executable by the machine (10 of FIG. 1) to perform a method of billing usage over a network (30 of FIG. 1; Par. [0022]). The method comprises determining when a network interface (54 of FIG. 2) is turned on at a client system (10 of FIG. 1). The method also comprises determining when the network interface (54 of FIG. 2) is turned off at the client system (10 of FIG. 1; Par. [0031]). The method further comprises storing, at the client system (10 of FIG. 1), information relating to a time-based bill based on when the network interface (54 of FIG. 2) is turned on and when the network interface (54 of FIG. 2) is turned off (Par. [0029]). The method yet further comprises providing, from the client system (10 of FIG. 1), the stored information to a billing system (40 of FIG. 2; Par. [0033]).

**VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- A. Whether claims 1, 5-6, 8-9, 11-16, 19-27 and 36 are made obvious by Jones.
- B. Whether claims 3 and 18 are made obvious by Jones in view of Schweitzer.
- C. Whether claim 4 is made obvious by Jones in view of Schweitzer and in further view of Buhler.
- D. Whether claim 28 is made obvious by Jones in view of Buhler.

**VIII. ARGUMENT**

**A. 35 U.S.C. §103(a) rejection of claims 1, 5-6, 8-9, 11-16, 19-27 and 36 as being unpatentable over Jones**

**1. The Obviousness Rejection of claims 1, 16 and 36**

**a. Jones does not teach or suggest storing, at a client system, information related to a time-based bill when a network interface is activated and when the network interface is deactivated, and transmitting a call detail record from a client system to a billing module on a billing system (or to a billing system, as recited in claim 36) based on the information related to the time based bill, as recited in claims 1, 16 and 36.**

In rejecting claims 1, 16 and 36, the Examiner contends that numerous sections of Jones disclose these elements of claims 1, 16 and 36 (See Final Rejection, Pages 4-5 and 8-9). Appellant's representative respectfully disagrees. Jones discloses that a packet billing system 104 detects a call setup and call complete between communication devices 112 and 113 (Jones, Pars. [0034]-[0035]). Additionally, Jones discloses that the packet billing system 104 generates a call record for the detected call and transfers the call detail record to a public switched telephone network (PSTN) billing system 194.

In contrast to the system disclosed in Jones, in claims 1, 16 and 36, the information related to a time-based bill based when a network interface is activated and deactivated is stored at the client system and a call detail record based on the information related to the time-based bill is transmitted from the client system to a billing module of a billing system (or to a billing system, as recited in claim 36). Instead, in Jones, a packet billing system 104 detects a call setup from a separate entity (the communication device 112). Therefore, Jones fails to teach or suggest storing, at a client system, information related to a time-based bill when a network interface is activated and when the network interface is deactivated, and transmitting a call detail record from a client system to a

billing module on a billing system (or to a billing system, as recited in claim 36) based on the information related to the time based bill, as recited in claims 1, 16 and 36.

**b. It would not have been obvious to modify the teachings of Jones to make the subject matter recited in claims 1, 16 and 36.**

The Examiner contends that claims 1, 16, and 36 are obvious in view of Jones because combining the communications devices 112 and the Packet Billing System 104 disclosed in Jones would merely be making the Packet Billing System integral to the communication devices 112, requiring only routine skill in the art (See Final Rejection, Page 19, citing *In re Larson*, 340 F.2d 965, 968, 144 U.S.P.Q. 347, 349 (C.C.P.A. 1965)). However, Appellant's representative respectfully submits that modifying the integrated Packet Billing System of Jones to create the method of billing network usage as recited in claims 1, 16 and 36 is not merely making something integral, as contended by the Examiner.

The modifications to Jones suggested by the Examiner would require replacing one billing system with many billing systems, each of which would be operating in a fundamentally different way than the integral Packet Billing System disclosed by Jones. For example, the Packet Billing System of Jones, if modified as suggested by the Examiner, would no longer interface with a PSTN billing system over a single link, thereby fundamentally modifying its functionality (See e.g., Jones, FIG. 1, Par. [0032]). Moreover, even assuming *arguendo* that the network billing method recited in claims 1, 16 and 36 actually performed the same function as the Packet Billing System disclosed by Jones, the suggested modifications to Jones would still represent making the single, integral Packet Billing System of Jones into redundant billing systems contained in multiple communication devices. Thus, the suggested modifications to Jones are not merely making several separate components into an integral unit as was done in the situation considered in *Larson*. 340 F.2d 965, 968, 144 U.S.P.Q. 347.

The Examiner also asserts that one of ordinary skill in the art would be motivated to modify the teachings of Jones to create the methodologies of claims 1, 16 and 36 because integrating the packet billing system into communications devices 112 of Jones would increase system efficiency and reduce system cost (See Final Rejection, page 19, lines 19-23). However, the Packet Billing System 104 disclosed by Jones can detect signaling (e.g., a call) made by any communication device over link 172 (See Jones, Par. [0032]). If the packet billing system 104 and the communication device 112 in Jones were combined (as suggested by the Examiner), the packet billing system 104 would only be able to detect signaling made from the communication device 112. That is, such a distribution of the packet billing system 104 into the communication devices would require that every communication device have a separate packet billing system. Therefore, the Examiner's purported modification of Jones would provide neither increased efficiency nor cost reduction as contended by the Examiner since the modification would replace a single packet billing system with a packet billing system for each communication device 112.

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, 127 S. Ct. 1727, 1741 (U.S. 2007) citing *In re Kahn*, 441 F.3d 997, 998 (CA Fed. 2006). Appellant's representative respectfully asserts that the Examiner has failed to provide such a rational underpinning since the Examiner has failed to show how combining and modifying the cited art to read on claims 1, 16 and 36 would increase efficiency and/or reduce costs by dividing a centralized billing function (the centralized packet billing system disclosed by Jones) into a distributed billing function.

Therefore, for the reasons stated above, claims 1, 16 and 36 are not made obvious by Jones. Accordingly, withdrawal of the rejection of claims 1, 16, and 36 is respectfully requested.

**2. The Obviousness Rejection of Claims 5-6, 8-9, 11-14 and 19-26**

Claims 5-6, 8-9, 11-14 and 19-26 depend from claims 1, 16 and 36 and are patentable for at least the same reasons as claims 1, 16 and 36, and for the specific elements recited therein. Accordingly, withdrawal of the rejection of claims 5-6, 8-9, 11-14 and 19-26 is respectfully requested.

**3. The Obviousness Rejection of Claims 15 and 27**

Claims 15 and 27 depend from claims 1 and 16 and are patentable over Jones for at least the same reasons as claims 1 and 16 and for the following reasons. Jones does not teach or suggest displaying call detail record information based on information (relating to a time-based bill), as recited in claims 15 and 27. In rejecting claims 15 and 27, the Examiner contends that numerous sections of Jones disclose the elements of claims 15 and 27 (See Final Rejection, Pages 7-8 and 11, citing abstract and Pars. [0007], [0012], [0014]-[0017], [0029], [0035] and [0037] of Jones). The cited sections of Jones disclose that a conventional PSTN billing system 194 receives a call detail record and processes the call detail record to generate a bill. However, in contrast to the call detail record recited in claims 15 and 27, the cited sections of Jones fails to teach or suggest that the call detail record disclosed in Jones is ever displayed. Thus, withdrawal of the rejection of claims 15 and 27 is respectfully requested.

**B. 35 U.S.C. §103(a) rejection of claims 3 and 18 as being unpatentable over Jones in view of Schweitzer**

Claims 3 and 18 depend from claims 1 and 16 and are patentable for at least the same reasons as claims 1 and 16, and for the specific elements recited therein. Moreover, in rejecting claims 3 and 18, the Examiner has cited Schweitzer solely for Schweitzer's disclosure of encrypting data transferred over a radio path (See Final Rejection, Pages 12-13, citing FIG. 1B and Pars. [0008] and [0009] of Schweitzer). However, the addition of Schweitzer fails to make up for the aforementioned deficiencies of Jones with respect to claims 1 and 16, from which claims 3 and 18 depend. Thus, Jones taken in view of Schweitzer does not make claims 3 and 18 obvious, and therefore claims 3 and 18 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

**C. 35 U.S.C. §103(a) rejection of claim 4 as being unpatentable over Jones in view of Schweitzer and in further view of Buhler**

Claim 4 depends from claims 3 and 1 and is patentable for at least the same reasons as claims 3 and 1, and for the specific elements recited therein. Moreover, in rejecting claim 4, the Examiner has cited Buhler solely for Buhler's disclosure of video communications (See Final Rejection, Page 13, citing Par. [0014] of Buhler). However, the addition of Buhler fails to make up for the aforementioned deficiencies of Jones taken in view of Schweitzer with respect to claims 3 and 1, from which claim 4 depends. Thus, Jones taken in view of Schweitzer and in further view of Buhler does not make claim 4 obvious, and therefore, claim 4 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

**D. 35 U.S.C. §103(a) rejection of claim 28 as being unpatentable over Jones in view of Buhler**

Claim 28 depends from claim 16 and is patentable for at least the same reasons as claim 16, and for the specific elements recited therein. Moreover, in rejecting claim 28, the Examiner has cited Buhler solely for Buhler's disclosure of video communications (See Final Rejection, Page 16, citing Par. [0014] of Buhler). However, the addition of Buhler fails to make up for the aforementioned deficiencies of Jones with respect to claim 16, from which claim 28 depends. Thus, Jones taken in view of Buhler does not make claim 28 obvious, and therefore, claim 28 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

**IX. APPENDICES**

The first attached Appendix contains a copy of the claims on appeal.

The second and third Appendices have been included to comply with statutory requirements.

Please charge any deficiency or credit any overpayment in the fees for this Appeal Brief to Deposit Account No. 20-0090.

Respectfully submitted,

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**Claims Appendix**

Claim 1 (Finally Rejected) A method of billing network usage over a network, said method comprising:

determining when a network interface is activated at a client system the network interface being activated when a communication link between the network and the client system is established;

obtaining at least one of a video file, a data file and an audio file across said communication link while said network interface is activated;

determining when said network interface is deactivated at the client system, the network interface being deactivated when the communication link between the network and the client system is disconnected, wherein the determining when a network interface is activated and the determining when said network interface is deactivated is performed by the client system;

storing, at the client system, information relating to a time-based bill based on when the network interface is activated and when the network interface is deactivated;

transmitting a call detail record from the client system to a billing module on a billing system based on the information relating to said time-based bill.

Claim 2 (Canceled)

Claim 3 (Finally Rejected)      The method of claim 1, wherein obtaining said information comprises encrypting said information, transmitting said encrypted information across said communication link, and decrypting said encrypted information.

Claim 4 (Finally Rejected)      The method of claim 3, wherein said information relates to a video file.

Claim 5 (Finally Rejected)      The method of claim 1, further comprising launching an application based on a menu selection.

Claim 6 (Finally Rejected)      The method of claim 5, further comprising transmitting a connect packet from a client to a router device, said connect packet being based on said selected application.

Claim 7 (Canceled)

Claim 8 (Finally Rejected)      The method of claim 6, further comprising transmitting a status packet from said router device to said client via said communication link.

Claim 9 (Finally Rejected) The method of claim 8, further comprising updating a status of said router device in a state table.

Claim 10 (Canceled)

Claim 11 (Finally Rejected) The method of claim 1, wherein said call detail record comprising information relating to at least one of a time, an Internet protocol address and a status.

Claim 12 (Finally Rejected) The method of claim 1, further comprising transmitting a disconnect packet from a client to a router device via said communication link.

Claim 13 (Finally Rejected) The method of claim 12, further comprising transmitting a status packet from said router device to said client via said communication link.

Claim 14 (Finally Rejected) The method of claim 13, further comprising updating a status of said router device in a state table.

Claim 15 (Finally Rejected) The method of claim 1, further comprising displaying call detail record information based on information relating to said time-based bill.

Claim 16 (Finally Rejected) A method comprising:  
connecting a client with a content provider of at least one of a video file, a data file and an audio file;  
obtaining said at least one of a video file, a data file and an audio file from said content provider;  
disconnecting said client from said content provider;  
determining an amount of time said client is connected to said content provider, wherein the determining an amount of time comprises:  
determining when a network interface to said content provider is activated; and  
determining when said network interface to said content provider is deactivated, wherein the determining when a network is activated and the determining when said network interface is deactivated is performed by the client system;  
storing, at the client system, information relating to a time-based bill based on when the network interface is activated and when the network interface is deactivated; and

transmitting a call detail record from the client system to a billing module on a billing system based on the information relating to said time-based bill.

Claim 17 (Canceled)

Claim 18 (Finally Rejected) The method of claim 16, wherein obtaining said at least one of a video file, a data file and an audio file comprises encrypting said at least one of a video file, a data file and an audio file, transmitting said encrypted at least one of a video file, a data file and an audio file from said content provider across a network and decrypting said encrypted at least one of a video file, a data file and an audio file.

Claim 19 (Finally Rejected) The method of claim 16, wherein connecting said client with said content provider comprises transmitting a connect packet from said client to a router device.

Claim 20 (Finally Rejected) The method of claim 19, further comprising transmitting a status packet from said router device to said client.

Claim 21 (Finally Rejected) The method of claim 20, further comprising updating a status of said router device in a state table.

Claim 22 (Finally Rejected) The method of claim 16, wherein the stored information comprises a call detail record.

Claim 23 (Finally Rejected) The method of claim 22, wherein said call detail record comprising information relating to at least one of a time, an Internet protocol address and a status.

Claim 24 (Finally Rejected) The method of claim 16, wherein disconnecting said client from said content provider comprises transmitting a disconnect packet from said client to a router device.

Claim 25 (Finally Rejected) The method of claim 24, wherein disconnecting said client further comprises transmitting a status packet from said router device to said client.

Claim 26 (Finally Rejected) The method of claim 25, further comprising updating a status of said router device in a state table.

Claim 27 (Finally Rejected) The method of claim 16, further comprising displaying call detail record information.

Claim 28 (Finally Rejected) The method of claim 16, wherein said at least one of a video file, a data file and an audio file relates to a video file.

Claims 29-35 (Canceled)

Claim 36 (Finally Rejected) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform a method of billing usage over a network, said method comprising:

determining when a network interface is activated at a client system, the network interface being activated when a communication link between the client system and the network is established;

obtaining at least one of a video file, a data file and an audio file across said communication link while said network interface is activated;

determining when said network interface is deactivated at the client system, the network interface being deactivated when the communication link between the client system and the network is disconnected, wherein the

determining when a network interface is activated and the determining when said network interface is deactivated is performed by the client system; storing, at the client system, information relating to a time-based bill based on when the network interface is activated and when the network interface is deactivated; and providing, from the client system, the stored information to a billing system.

Claim 37 (Cancelled)

**Evidence Appendix**

None

**Related Proceedings Appendix**

None